



POTASSIUM FLUORIDE

Material Safety Data Sheet

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Emergency Telephone Number
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Effective Date: 08-13-85

PRODUCT IDENTIFICATION:

Synonyms: None.

Formula CAS No.: 13455-21-5 (Hydrated)
TSCA CAS No.: 7789-23-3 (Anhydrous)

Molecular Weight: 94.14

Hazardous Ingredients:
Not applicable.

Chemical Formula: KF 2H₂O

PRECAUTIONARY MEASURES

DANGER! CAUSES BURNS. HARMFUL IF SWALLOWED OR INHALED.

Avoid breathing dust.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Do not get in eyes, on skin, or on clothing.

EMERGENCY/FIRST AID

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Never give anything by mouth to an unconscious person.
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes.
In all cases call a physician.
SEE SECTION 5.

DOT Hazard Class: ORM-B

Physical Data

SECTION 1

Appearance: Colorless crystals.

Odor: Odorless.

Solubility: 349g/100cc water @ 18°C (64°F).

Boiling Point: 156°C (323°F).

Vapor Density (Air=1): No information found.

Melting Point: 41°C (106°F).

Vapor Pressure (mm Hg): No information found.

Specific Gravity: 2.45

Evaporation Rate: No information found.

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Fire and Explosion Information

SECTION 2

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Reactivity Data

SECTION 3

Stability:

Stable under ordinary conditions of use and storage. Attracts moisture from the air.

Hazardous Decomposition Products:

Emits toxic fumes of fluorine when heated to decomposition.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Platinum plus bromine trifluoride; reacts with strong acids to form hydrogen fluoride.

Leak/Spill Disposal Information

SECTION 4

Ventilate area of leak or spill. Clean-up personnel may require respiratory protection from dust.

Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

Disposal: Whatever cannot be saved for reclamation may be delivered to an approved waste disposal facility.

Ensure compliance with local, state and federal regulations.

Health Hazard Information

SECTION 5

A. Exposure/Health Effects

Inhalation: May cause irritation to the respiratory tract; symptoms may include coughing, sore throat, and labored breathing. May be absorbed through inhalation of dust; symptoms may parallel ingestion.

Ingestion: May cause salivation, nausea, vomiting, diarrhea, and abdominal pain, followed by weakness, tremors, shallow respiration, cardopedal spasm, convulsions, and coma. May cause brain and kidney damage. Death may be caused by respiratory paralysis.

Skin Contact: May cause skin burns.

Eye Contact: May cause irritation and serious eye damage.

Chronic Exposure: Repeated ingestion of small amounts may cause mottling of teeth and bone damage (osteosclerosis).

Aggravation of Pre-existing Conditions: No information found.

B. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Never give anything by mouth to an unconscious person.

Skin Exposure: Remove any contaminated clothing. Wipe off excess from skin. Wash skin with plenty of water for at least 15 minutes. Get medical attention promptly.

Eye Exposure: Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

C. TOXICITY DATA (RTECS, 1982)

Oral rat LD50: 245 mg/kg (KF).

Occupational Control Measures

SECTION 6

Airborne Exposure Limits: -OSHA Permissible Exposure Limit (PEL): 2.5mg(F)/m³ (TWA).
-ACGIH Threshold Limit Value (TLV): 2.5mg(F)/m³ (TWA).

Ventilation System: A system of local exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the dust or vapor at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved) If the TLV is exceeded, a dust/mist respirator with chemical goggles may be worn, in general, up to ten times the TLV. Consult respirator supplier for limitations. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Contact lenses should not be worn when working with this material.

Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information SECTION 7

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Separate from strong acids.

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